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Effect of Mindfulness-Based Cognitive Therapy on Self-Compassion, Satisfaction with Life, and Mindfulness

Abstract

Growing evidence supports the effectiveness of mindfulness-based interventions for the treatment of depression and anxiety disorders, however, comparatively few studies have examined the effects of mindfulness-based interventions on positive variables such as mindfulness, self-compassion, and life satisfaction (Hofmann, Sawyer, Witt, & Oh, 2010; Chiesa & Serretti, 2010). This dissertation used a quasi-experimental design to examine the effects of mindfulness-based cognitive therapy (MBCT; Segal & Teasdale, 2002) on 21 psychology graduate students. The correlations between mindfulness, self-compassion, and satisfaction with life were also examined. Outcome measures include Mindful Attention Awareness Scale (MAAS-Brown & Ryan, 2003), Five Factor Mindfulness Questionnaire (FFMQ, Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006), Self-Compassion Scale (SCS, Neff, 2003a), and Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). Contrary to expectation, the results indicate no statistically significant differences between MBCT and control group on any of the outcome variables. Additional analyses indicated that the common humanity factor of self-compassion was significantly correlated with life satisfaction. Mindfulness and self-compassion also demonstrated positive significant correlations.

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EFFECT OF MINDFULNESS-BASED COGNITIVE THERAPY ON SELF-
COMPASSION, SATISFACTION WITH LIFE, AND MINDFULNESS

A DISSERTATION
SUBMITTED TO THE FACULTY
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HILLSBORO, OREGON
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ABSTRACT

Growing evidence supports the effectiveness of mindfulness-based interventions for the treatment of depression and anxiety disorders, however, comparatively few studies have examined the effects of mindfulness-based interventions on positive variables such as mindfulness, self-compassion, and life satisfaction (Hofmann, Sawyer, Witt, & Oh, 2010; Chiesa & Serretti, 2010). This dissertation used a quasi-experimental design to examine the effects of mindfulness-based cognitive therapy (MBCT; Segal & Teasdale, 2002) on 21 psychology graduate students. The correlations between mindfulness, self-compassion, and satisfaction with life were also examined. Outcome measures include Mindful Attention Awareness Scale (MAAS-Brown & Ryan, 2003), Five Factor Mindfulness Questionnaire (FFMQ, Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006), Self-Compassion Scale (SCS, Neff, 2003a), and Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). Contrary to expectation, the results indicate no statistically significant differences between MBCT and control group on any of the outcome variables. Additional analyses indicated that the common humanity factor of self-compassion was significantly correlated with life satisfaction. Mindfulness and self-compassion also demonstrated positive significant correlations.

Keywords: Mindfulness, mindfulness-based cognitive therapy (MBCT), self-compassion, and life satisfaction.

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Introduction

Within the Western psychological context mindfulness is often defined as “a particular form of awareness that emerges from paying attention, on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment to moment” (Kabat-Zinn, 2003, p. 145). Over the past 25 years mindfulness has been incorporated into treatment for a number of psychological and physical disorders including major depressive disorder, post-traumatic stress disorder, generalized anxiety disorder, panic disorder, borderline personality disorder, substance abuse, and fibromyalgia (Baer, 2003).

One such intervention is mindfulness-based cognitive therapy (MBCT: Segal, Teasdale, & Williams, 2002), an 8-week group treatment protocol that combines mindfulness and cognitive therapy for the prevention of depressive relapse. As with most mindfulness based intervention, MBCT also includes exercises and assignments which implicitly promote self-compassion, a factor which has generally been excluded from the Western psychological definition of mindfulness. Self-compassion is defined as compassion towards oneself when experiencing suffering due to external events or personal failings (Neff, 2003b). Neff's (2003a) conceptualization of self-compassion includes three aspects: self-kindness, common humanity, and mindfulness. Similarly, Gilbert (2005) describes self-compassion as a means to activate a system of soothing and connectedness.

In addition to being used as a treatment for many psychological disorders mindfulness meditations and exercises are used by many clinicians and laypeople as a means to improve their life. One means of measuring one's life is through cognitive

appraisal. Diener (1985) defines life satisfaction as the cognitive appraisal of one's life according to one's individual value system.

Several studies have demonstrated that mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1990) courses, upon which MBCT is based, can lead to increases in mindfulness, self-compassion, and satisfaction with life (Shapiro, Biegel, & Brown, 2007; Shapiro, Astin, Bishop, & Cordova, 2005).

In this dissertation I examined the impact of an MBCT-focused class on mindfulness on mindfulness, self-compassion, and life satisfaction amongst a sample of students in a clinical psychology doctoral training program. Specifically, using a quasi-experimental design I examined possible differences in these factors between participants in an MBCT-focused class and a control group class. In addition, the relationship between these factors was examined.

Western Mindfulness

While several authors have reported that mindfulness has permutations within most major religions it is most clearly defined in Buddhism (Brown & Ryan, 2003). Its cultivation has roots in Eastern spiritual practices (Olendzki, 2005). The majority of researchers in the West were initially introduced to mindfulness through their individual spiritual practices, most often from the Buddhist perspective. As researches began to explore mindfulness within the Western psychological context much of the ethical context surrounding mindfulness was excluded.

In the Western psychological context, a number of definitions of mindfulness have emerged. Bishop et al.'s (2004) definition of mindfulness stresses the importance of

present centered awareness of internal and external stimuli in the absence of elaborative and judgmental processes. Brown and Ryan (2003) define mindfulness as being attentive to what is taking place in the current moment. Linehan's (1993) definition of mindfulness includes a series of skills including observe, describe, and participate with an attitude of nonjudgment, focusing on one thing in the moment, and paying attention to what is effective. In critiquing existing mindfulness definitions, Bishop et al. (2004) noted that what some describe as components of mindfulness including equanimity and compassion, may in fact result from a mindful style of attention.

The excitement surrounding mindfulness can obscure the fact that there is no consensus regarding what it exactly is and what components are necessary for its cultivation. While definitions vary within the Western psychological context, many researchers agree that mindfulness includes present-centered attention in the absence of judgmental and elaborative processes (Brown & Ryan, 2003). Objects of attention may be both internal and external and an attitude of acceptance is often described as necessary (Baer, 2003; Hayes, Strosahl, & Wilson, 1999; Kabat-Zinn, 1994; Linehan, 1993). It is the absence of cognitive elaboration and judgment that distances mindfulness from other forms of awareness such as private self-consciousness, self-awareness, and psychological mindedness (Beitel, Ferrer, & Cecero, 2005; Brown & Ryan, 2003). Segal et al. (2002) have theorized that it is the attitude of suspended judgment and the absence of elaboration within mindfulness that allows it to disrupt ruminative thought patterns and decrease incidence of depressive relapse.

Mindfulness as a construct can be contrasted with mindlessness. An example of mindfulness would include eating a meal while immersing oneself into the flavors,

scents, and texture of the meal, fully engaging with the experience. In contrast an example of mindlessness includes shoveling handfuls of crackers into your mouth while watching television. The flavor, texture, scents which are present are never attended to as one is engaged more so within another experience.

Mindfulness should also not be confused with the various forms of meditation that were the subject of research in the 1970's and 80s. Transcendental Meditation and Benson's relaxation response, for example, were primary concentrative types of meditation in which awareness was focused upon a particular object, sound, mantra to the exclusion of other aspects of experience. Although these two are different, a certain degree of concentration is necessary for effective mindfulness meditation. Often times this may confuse a new practitioner of mindfulness as several of the initial exercises include the concentration style of meditation (Germer, 2005; Kabat-Zinn, 1994). However, within mindfulness meditation the goal is not absorption, and the concentrative exercises are used in order to maintain a clear and continuous focus (de Silva, 1990). Once an appropriate level of concentration is attained the focus moves from a particular object to the ongoing stream of present experience.

Kabat-Zinn (2003), one of the pioneers of incorporating mindfulness into treatment, noted that mindfulness is an inherent human capacity that we engage in to varying degrees at various moments. Mindfulness has been viewed as both a state and a trait (Baer, 2003; Lau et al., 2006; Walach, Buchheld, Buittenmuller, Kleinknecht, & Schmidt, 2005). It has been hypothesized that through practice one may increase the incidence of mindfulness in one's life (Hayes et al. 1999; Kabat-Zinn, 1994; Linehan, 1993). The manner by which mindfulness can be cultivated varies between practitioners

of mindfulness. Kabat-Zinn (1990) and those that that derive their research from him including Segal et al. (2002), stress the importance of formal meditative practice. Linehan (1993) and Hayes (1999) focus less on formal meditative practice and instead stress practices which bring mindfulness to daily activities. Some of the differences in practice may be attributed to the different schools of Buddhism from which researchers drew upon in their own lives. Another factor is the nature of the disorders the researchers were seeking to ameliorate (Baer et al., 2004).

The active ingredients of mindfulness have been hypothesized to come from a variety of sources. Exposure and desensitization, improved self-management, relaxation, decentering, a cognitive shift in which thoughts are viewed as “just thoughts”, and acceptance have all been suggested as possible mechanisms of change (Baer, 2003). Neuroimaging studies have pointed towards neuronal changes in the prefrontal cortex of mindfulness meditators which are associated with a decrease in anxiety (Davidson et al., 2003). Researchers have not yet come to consensus regarding which process or set of processes has been most conducive towards positive change (Baer, 2003). As most therapeutic approaches that make use of mindfulness also include additional behavioral and cognitive interventions it has not yet been determined to what extent mindfulness contributes to the apparent reduction in symptoms over and beyond the cognitive and behavioral components that have been noted in multiple studies (Baer, 2003). In addition to this lack of consensus regarding a definition of mindfulness and the possible mechanisms of change, there also appears to be substantial differences between the concepts of mindfulness within the Western psychological context and the Eastern spiritual tradition from which it emerged.

Despite these discrepancies, mindfulness has demonstrated effectiveness in treating a number of psychological and physical disorders including major depressive disorder, post-traumatic stress disorder, generalized anxiety disorder, panic disorder, borderline personality disorder, substance abuse, and fibromyalgia (Baer, 2003). It has been viewed as a fundamental component of mindfulness-based cognitive therapy (MBCT; Segal, Williams, & Teasdale, 2002), mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1990), dialectical behavior therapy (DBT; Linehan, 1993), and acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson 1999). Baer (2004) notes that mindfulness “may help” those with a variety of disorders and that there is sufficient clinical research to support MBSR as a “probably efficacious” treatment using the American Psychological Association (APA) Division 12 of Clinical Psychology’s Task Force on Promotion and Dissemination of Psychological Procedures (1995) criteria, while MBCT appears poised to receive the same designation as well.

MBCT is an 8-week group treatment protocol that combines mindfulness and cognitive therapy for the prevention of depressive relapse (Segal, Teasdale, & Williams, 2002). The authors integrated aspects of cognitive therapy to the existing MBSR course in order to tailor a treatment to prevent depressive relapse. The treatment departs from traditional cognitive therapy in that thoughts are not directly challenged. Instead, the participants are taught to recognize that thoughts are mental events, not facts. Through recognizing their thoughts within the framework of “thoughts are not facts” participants can become aware of the negative thinking cycles which may lead to depressive relapse without being caught up within them. This awareness of thoughts without being carried

away or responding automatically, allows participants to discover more skillful means to deal with difficult thoughts and emotions (Segal, Teasdale, & Williams, 2002).

Research has found that MBCT is most effective for those with at least two previous episodes of depression (Segal, Teasdale, & Williams, 2002; Ma & Teasdale, 2004). While several studies have determined MBCT is effective in decreasing rates of depressive relapse few studies have looked specifically at more positive psychology variable such as satisfaction with life, mindfulness, and self-compassion. In addition no research is currently available which explores the effects of MBCT within a classroom setting.

While there are few studies exploring positive psychology variables of MBCT several studies exist which explores those variables within the format of MBSR course, upon which MBCT has been based (Segal, Teasdale, & Williams, 2002; Lazar, 2005). The programs are so similar that the creators of the MBCT program recommend the MBSR program as a means to learn to provide the MBCT course (Segal, Teasdale, & Williams, 2002). However, despite a great deal of similarities there are differences. The MBCT course added aspects of cognitive therapy, removed loving kindness meditation, and eliminated a full day meditation retreat. In addition, the MBCT course has been specifically tailored to prevent depressive relapse and the MBSR course is a more general means to reduce suffering.

Several studies exist which explore satisfaction with life, mindfulness, and self-compassion within MBSR programs (Shapiro, Brown, & Biegel, 2007; Shapiro, Astin, Bishop, & Cordova, 2005). MBSR programs have been associated with increases in mindfulness, self-compassion, and satisfaction with life. Research has pointed towards

practice as the means by which MBSR has demonstrated increases in mindfulness (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Brown & Ryan, 2004; Linehan, 1993). MBSR and MBCT both involve daily 45 minute formal meditations, and the also encourage integrating mindfulness informally into daily tasks (Kabat-Zinn, 1990; Segal, Teasdale, & Willams, 2002).

In addition, two studies have examined MBSR within a population of graduate students in psychology (Christopher, Christopher, Dunnagan, & Schure, 2006; Shapiro, Brown, & Biegel, 2007). However, of those studies only Sharpiro et al.'s (2007) collected measures of mindfulness and well-being. The findings indicated that MBSR is related to increases in both mindfulness and well-being.

Self-Compassion

Self-compassion differs from the more well known construct of compassion in that it applies the understanding, gentle, and non-judgmental way of being to the self rather than to others. Self-compassion emerged in the Western psychological context via two parallel routes. Like mindfulness, one version of self-compassion emerged from Buddhist thought and entered the Western psychological context through Western psychologists' contact with Buddhism (Neff, 2003; Neff, 2004). An alternate but highly related view of self-compassion came about via theories regarding reward systems and attachment in evolutionary psychology (Gilbert, 2005).

The version of self-compassion that emerged through contact with Buddhism has been most clearly defined in the work of Neff (2003). Within this context, three separate factors are needed to bring about the overarching factor of self-compassion. The factors

include: Self-kindness, Common Humanity, and Mindfulness (Neff, 2003a; Neff, 2004). Each of the factors are conceptualized as being part of a continuum and paired with its opposite. For example Self kindness is contrasted with Self-judgment, Common Humanity contrasted with Isolation, and Mindfulness is contrasted with Over-identification to create the six factors of the Self-Compassion Scale (Neff, 2003a). Each of the first three factors must be present for self-compassion to come about.

Self-kindness is defined as a propensity to be understanding and gentle in relation to oneself (Neff, 2003a). For one high in self-kindness this gentle attitude towards oneself will be present during times of failure and trial as well as during times of ease and success. It is important to understand that this kindness is to be given not only when one's suffering comes about due to the actions of others but also when one has been the cause of failure and suffering (Neff, in press). Self-kindness is similar to Rogers (1961) unconditional positive regard; however in this context it is a relation of the self to the self rather than therapist to client (Neff, 2003). However, self-kindness is not an unrealistically positive view of the self. Leary and colleagues (2007) found that after completing a task those who are high in self-compassion rated their performance more closely to a rating given by an outside observer than those who were low in self-compassion. Self-kindness is an attitude which is extended to both successes and failures. It is not about making judgments, but about bringing an attitude of gentleness and acceptance towards oneself. It is important to note that acceptance and resignation are not the same and that acceptance involves a stance of being present with what is taking place versus resignation which is more a sense of helplessness or powerlessness regarding the situation (Segal et al., 2002). As Gilbert and Procter (2006) noted acceptance and

compassion towards maladaptive behaviors are not the same as submissive acceptance. Self-kindness is rooted in an acceptance of the self and fully examining what is present, not a resignation that nothing can ever be achieved or that situations will not change. Self-kindness provides a means by which one can view all aspects of oneself including successes and failings. Self-compassion provides a means by which one can comfort oneself in a difficult situation instead of acting impulsively to immediately change the situation (Neff, 2011). Self-compassion can be contrasted with self-judgment and a harsh and critical stance towards oneself (Neff, 2003a).

The common humanity factors refers to a means of relating to suffering that connects one with humanity rather than increasing isolation (Neff, 2003a). This particular stance towards suffering is rooted in the insight that all humans suffer, at times fail, and engage in behaviors which result in unpleasant consequences. This stance can result in bringing about feelings of connection in the midst of pain. It may diminish some of the suffering resulting from the pain in that one views pain as simply being part of the human condition rather than a personal tragedy (Neff, 2011). Common humanity is contrasted with isolation; in isolation one experiences pain but feels as if they are the only one suffering. This unique suffering is then viewed as a something which separates the person from humanity at large which the person believes is not suffering (Neff, 2003).

The final factor of self-compassion is mindfulness. In this context mindfulness is viewed as a particular style of awareness of the present moment which includes all experiences (pleasant and unpleasant) without being overwhelmed by them (Neff, 2011). In relation, to the mindfulness concepts discussed above it is more akin to Brown and Ryan's (2003) single factor conceptualization than Baer, Smith, and Allen's (2004) four-

factor conceptualization. Mindfulness is contrasted with overidentification in which one is overwhelmed and tends to ruminate on their pain or perceived failings (Neff, 2011).

In the undergraduate student validation sample for the Self-Compassion Scale, Neff (2003a) found that men exhibited statistically significant greater self-compassion than women. In a related study, Neff (2003a) found that practicing Buddhists who engaged in meditation and were familiar with the concept of self-compassion exhibited greater self-compassion than non-Buddhist undergraduate students who were unfamiliar with the concept.

Gilbert and Procter's (2006) conceptualization of self-compassion emerged from attachment theory and evolutionary psychology. It refers not explicitly to self-compassion, but to "inner compassion for the self" (Gilbert & Procter, 2006). Their conceptualization of self-compassion includes seven abilities: desire to care for the well-being of another, distress sensitivity/recognition, sympathy, distress tolerance, empathy, non-judgment, and an attitude of emotional warmth (Gilbert & Procter, 2006). These abilities are first applied to another person and then can be applied to the self. Gilbert and Procter's abilities have some overlap with Linehan's core mindfulness and other skills (Gilbert & Procter, 2006; Linehan, 1993). Gilbert and Procter (2006) contrast "inner compassion for the self" with self-criticism and shame.

Within their conceptualization, this inner compassion for the self is tied to a positive affect system which is concerned with care and affiliation (Gilbert, 2009). They hypothesize that this system is initially activated during the early years of childhood in response to caregivers who create a soothing and safe environment. From this foundation one is later able to provide self-care and soothing. However, if a caring and safe

environment was not present this system may not have become adequately activated which can result in an over activation of threat systems and maladaptive levels of self-criticism (Gilbert, 2009).

Improvements in self-compassion have been noted as a result of participating in MBSR courses and mindfulness exercises (Shapiro, Astin, Bishop, & Cordova 2005; Shapiro, Brown, & Biegel, 2007, Germer, 2009). Even brief, ten minute, mindfulness exercises have demonstrated to improve self-kindness, a component of self-compassion, even though self-compassion was never explicitly mentioned (Moore, 2008). While no research has yet demonstrated a connection between MBCT and self-compassion, the close relationship between MBSR and MBCT makes it probable that MBCT can lead to increases in self-compassion.

Western psychological definitions of mindfulness overlap with the mindfulness component of Neff's self-compassion. In addition however, mindfulness training programs such as MBSR and MBCT also implicitly touch upon self-kindness, another component of Neff's self-compassion. Through the use of poetry and within the instructions for dealing with difficulties Segal and colleagues (2002) attempt to cultivate "friendship rather than hostility towards experience". They describe the importance of cultivating "gentle, kindly, friendly awareness" (Segal et al., 2002 p 227). Kabat-Zinn (2003) discusses a particular form of attention that is affectionate, compassionate, and friendly even when the object of that attention may be unpleasant. Shapiro et al. (2006) discusses the importance of intention in mindfulness and how it results in a kindness, curiosity, and openness of awareness. The kindness, friendliness, and openness of awareness that is promoted through mindfulness are likely contributing to increases in

self-compassion. In addition, the common-humanity factor of self-compassion may also be promoted within existing Mindfulness-Based training courses due to the group format and discussions, in which many participants are likely to find that others share their difficulties with mindfulness practice as well as life challenges.

Satisfaction with Life

Satisfaction with life is a construct that emerged within subjective well-being research (Diener, Emmons, Larsen, & Griffin, 1985). Subjective well-being has been conceptualized as containing two separate, but related components: an affective component and a cognitive component (Diener & Diener, 1995). Satisfaction with life measures the cognitive component. It is the cognitive appraisal of one's entire life using one's individual criteria (Diener & Diener, 1995; Diener et al., 1985). The cognitive component of subjective well-being is generally viewed to take into consideration longer time periods than the affective component, upon which immediate events play a larger role (Diener & Diener, 1995). In addition the cognitive component is more influenced by values and life goals, whereas the affective component is often more influenced by current events which may not have a long-term effect (Diener & Diener, 1995). Satisfaction with life has demonstrated both temporal stability as well as sufficient flexibility to measure changes over time (Diener & Diener, 1995)

Research has shown that mindfulness training courses can contribute to improved satisfaction with life (Shapiro, Astin, Bishop, & Cordova, 2005). Improvements may be due to improved self-management, acceptance of painful experiences, less rumination, and stronger connection to goals and values (Baer, 2003).

Mindfulness and Self-Compassion

Neff's (2004) conceptualization self-compassion makes use of mindfulness, but includes more than simply mindfulness. While Brown and Ryan's (2003) definition of mindfulness provides an excellent description of one of the factors necessary for achieving self-compassion, it does not fully encompass the other two factors: self-kindness and common humanity (Neff, 2004). So while the two constructs overlap to a degree self-compassion also includes aspects which are not explicitly addressed in most Western psychological definitions of mindfulness.

The connection between self-compassion and mindfulness is complicated by the implicit cultivation of self-compassion with many mindfulness-based training courses. While the programs do not always explicitly state that self-compassion is a goal, the two concepts are interconnected within the Buddhist framework from which many mindfulness trainings have emerged. Within the Buddhist context it is believed that self-compassion will result if one practices mindfulness (Gilbert & Procter, 2006). Shapiro and colleagues (2007) completed research which supports this view, and found that completing an 8-week MBSR course improved self-compassion.

Self-Compassion and Satisfaction with Life

Research regarding the correlation between self-compassion and satisfaction with life has been mixed (Neff, 2003; Shapiro et al. 2005). In the validation study for the SCS Neff (2003) found that the SCS demonstrated a significant positive correlation with the Satisfaction with Life Scale (SWL; Diener et al., 1985). However, when Shapiro, Astin,

Bishop, and Cordova (2005) completed an experimental study measuring changes in SCS and SWL in response to a modified mindfulness-based stress reduction course no significant correlation between the two scales was found. However, only ten participants completed the protocol so the finding may be due to small sample size (Shapiro et al. 2005).

Mindfulness and Satisfaction with Life

Measures of mindfulness have consistently been positively correlated with satisfaction with life and the emotional components that contribute to subjective well-being (Brown & Ryan 2003; Shapiro, Astin, Bishop, & Cordova, 2005). This finding is especially interesting as the available measures of mindfulness generally do not inquire about well-being or life satisfaction (Brown & Ryan 2003). More research has been done that demonstrates the correlation between mindfulness and subjective well-being than specifically with satisfaction with life (Baer, 2003; Kabat-Zinn, 2000; Shapiro, Schwartz, & Bonner, 1998). However, several studies suggest that mindfulness is positively correlated with satisfaction with life, and negatively correlated with measures of distress (Baer, 2003). Among the four factors of the Kentucky Inventory of Mindfulness Skills (KIMS; Baer, Smith, & Allen, 2004.) satisfaction with life was significantly correlated with Describe and Act with Awareness, but not Accept without Judgment and Observe. In addition, the Mindful Attention and Awareness Scale (MAAS; Brown & Ryan, 2003.) was significantly positively correlated with a 15-item measure of SWL in two separate samples. Taken together these findings suggest that mindfulness as measured by the MAAS and two factors of the KIMS are positively related to life satisfaction.

Purpose of Study

The primary purpose of this dissertation was to replicate and expand upon research regarding a MBCT training course. To date, studies of MBCT have focused on its effectiveness as treatment for depression and none have examined its effectiveness at improving mindfulness, satisfaction with life, and self-compassion. Few studies exist which specifically examine the relationship between satisfaction with life, mindfulness, and self-compassion within participants of a mindfulness-based training course, and none have used MBCT (Shapiro, et al. 2005). To address gaps in the literature this dissertation examined the effectiveness of an MBCT-based course in promoting mindfulness, self-compassion, and satisfaction with life within graduate students in psychology. In addition, how those factors relate to one another was also examined. It is hoped that a larger sample size and higher completion rates may result in stronger and perhaps novel findings.

Statement of the Hypotheses

Hypothesis 1: Participants in a mindfulness-based cognitive therapy class would exhibit greater positive changes in mindfulness, self-compassion, and satisfaction with life than participants in a control group class.

Hypothesis 2: Mindfulness and self-compassion would be positively correlated.

Hypothesis 3: Self-compassion and satisfaction with life would be positively correlated.

Method

This dissertation employed a quasi-experimental design to examine differences between-groups in mindfulness, self-compassion, and satisfaction with life. Participants were selected based on their enrollment in either a Mindfulness-Based Interventions class (treatment) or Professional Orientation class (control). Students enrolled in the Mindfulness-Based Interventions class students completed an eight week MBCT course as part of the class. Students enrolled in Professional Orientation did not receive any interventions regarding the cultivation of mindfulness or self-compassion.

Participants

Participants were 30 (27 female, 3 male) graduate students recruited from the professional psychology program at Pacific University, a medium sized private university located in Oregon. The mean age for participants was 28 years ($SD = 6.79$). The racial and ethnic makeup of the sample was 10% ($n = 3$) Asian American, 3.3% ($n = 1$) Latino American, 80% ($n = 24$) White American, 10% ($n = 3$) Multiracial. The primary responses to religious affiliation among the sample are 43.3% ($n = 13$) none, 16.7% ($n = 5$) other, 16.7% ($n = 5$) Catholic, and 13.3% ($n = 4$) Christian, 6.7% ($n = 2$) Jewish, and 3.3% ($n = 1$) Protestant.

Materials and Measures

Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003). The MAAS is a 15-item measure which makes use of a 6-point Likert-type scale to assess attention to and awareness of present events and experiences (Brown & Ryan, 2003). An

explanatory factor analyses of an initial pool of 184 items indicated that one factor accounted for 95% of the variation: attention to and awareness of the present moment (Brown & Ryan, 2003). Sample items include “I rush through activities without being really attentive to them” and “I do jobs or tasks automatically, without being really attentive to them” (note that all items are reverse scored). The MAAS demonstrated good test re-test reliability over a 1 month period ($r = .81$) and a good range of internal consistency across several samples ($\alpha = .80-.87$) (Brown & Ryan, 2003).

The MAAS demonstrated negative correlations with the Neuroticism factor on the NEO Personality Inventory, the State-Trait Anxiety Inventory demonstrating good convergent validity (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995), and the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). The MAAS is also positively correlated with the Positive Affect factor of the Positive and Negative Affect Schedule (Brown & Ryan, 2003).

Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). The FFMQ is a 39-item measure which makes use of a 5-point Likert-type scale to assess five elements of mindfulness: observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience (Baer, et al. 2006). The scale was constructed from a factor analytic study of five existing mindfulness questionnaires.

Sample questions for each factor include: Observing (e.g., “When I am walking, I deliberately notice the sensations of my body moving.”), Describing (e.g., “I’m good at finding words to describe my feelings.”), Act with Awareness (e.g., “When I do things,

my mind wanders off and I'm easily distracted." Reverse Scored.), Nonjudge (e.g., "I criticize myself for having irrational or inappropriate emotions" Reverse Scored.), and Non-reactivity to Inner Experience (e.g., "I perceive my feelings and emotions without having to react to them."). The FFMQ demonstrated good internal consistency ($\alpha = .75-.91$).

Four of the five factors of the FFMQ (all except Observing) were negative predictors of psychological symptoms as measured by the Brief Symptoms Inventory (Derogatis, 1992). The same four were also negatively correlated with the Profile of Mood States (McNair, Lorr, & Droppelman, 1971) and the Depression Anxiety Stress Scales (Lovibond & Lovibond, 1995). The Observing factor demonstrated a negative correlation only among meditators with positive correlation taking place for non-meditators. All factors of the FFMQ were positively correlated with measure of positive well being as measured by the Psychological Well-Being Scales (Ryff, 1989).

Self-Compassion Scale (SCS; Neff, 2003a). The SCS is a 26-item measure which makes use of a 5-point Likert-type scale to assess self-compassion, defined as a combination of Self-kindness, Common humanity, and Mindfulness (Neff, 2003a). Self-kindness is defined as an understanding and gentle relation to oneself in regards to personal failings and difficult life experiences. Common humanity refers to an understanding that suffering and failings are universal to the human experience. Mindfulness in this context is defined as a particular form of awareness that acknowledges one's suffering and emotions without being overwhelmed or controlled by them. Self-compassion is viewed as a relation to oneself that emerges through

maintaining these three concepts. Each factor is necessary to achieve self-compassion (Neff, 2003b).

The scale includes 6 factors, based on the three components of self-compassion and their opposites, including: Self-kindness (e.g., “When I’m going through a very hard time, I give myself the caring and tenderness I need.”), Self-judgment (e.g., “I’m intolerant and impatient towards those aspects of my personality I don’t like.”), Common humanity (e.g., “When I am down and out, I remind myself that there are lots of other people in the world feeling like I am.”), Isolation (e.g., “When I’m feeling down, I tend to feel like most other people are probably happier than I am.”), Mindfulness (e.g., “When something painful happens I try to take a balanced view of the situation”), and Over-identification (e.g. “When I fail at something important to me I become consumed by feelings of inadequacy.”). The SCS demonstrated good test re-test reliability ($r = .93$) and a good range of internal consistency ($\alpha = .94$) (Neff, 2003b).

The SCS demonstrated adequate discriminant validity with negative correlations with the Spielberger Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970), the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), and neurotic perfectionism as measured by the Almost Perfect Scale (Slaney, Mobley, Trippi, Ashby, & Johnson, 1996). The SCS is positively correlated with Satisfaction with Life Scale (Diener et al., 1985).

Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985).

SWLS is a 5 question questionnaire which makes use of a Likert-type scale to assess life satisfaction, which is defined as the “cognitive appraisal of one’s life” (Diener, Emmons,

Laresen, & Griffin, 1985, p.71). The SWLS has a single factor structure. Sample items include “In most ways my life is close to ideal”, “If I could live my life over I would change almost nothing”, and “I am satisfied with my life”. The SWLS demonstrated good test re-test reliability over a 2 month period ($r = .82$) and good internal reliability ($\alpha = .87$) (Pavot & Diener, 1993). The SWLS demonstrate adequate discriminant validity through negative correlation with measures of depression, anxiety, and distress as well as positive correlations with positive affect and extraversion (Pavot & Diener, 1993).

Intervention

As part of a 15 week Mindfulness-Based Interventions course participants completed an 8-week MBCT course that blended mindfulness exercises and cognitive therapy for the treatment of depressive relapse (Segal, et al. 2002). The course used readings, experiential exercises, discussion, and daily practice to increase familiarity with mindfulness meditation. Participants attended weekly 2 hour group meetings which included meditation practice, lecture, and discussion. In addition, course participants were expected to complete homework consisting of daily 45 minute meditation practices (sitting meditation, body scan, and/or Hatha yoga), shorter practices (3 minute breathing space) as well as some written homework (homework record form, pleasant events calendar, relapse action plan). Following the 8 week MBCT experiential portion of the course, participants led discussions and presented research. Participants were graded according to their attendance, journals, exam, and presentations. The course is designed to teach participants a new way of relating to their thoughts, feelings, and behaviors, which is hypothesized to diminish the probability of relapsing into depression (Segal, et

al. 2002). In addition to the MBCT course, students received instruction regarding the Buddhist teachings which underlie much of the MBCT program.

Design and Procedure

Potential participants were recruited in graduate psychology courses at Pacific University based on their enrollment in one of two courses: Mindfulness-Based Interventions and Professional Orientation. Participants were entered into 3 separate raffles for \$25 book store gift cards. Participants were presented all study materials on three separate occasions: before the classes begins, at the midpoint of the courses, and at the completion of the courses. Participants were initially contacted via email taken from class rosters. Participants completed seven measures at each data collection point as part of a larger project.

All participants completed an informed consent, as well as all of the self-administered, paper-and-pencil measures noted in the Measures section. Participants were instructed in the informed consent that they were able to voluntary withdrawal from the study without prejudice, and that they could withdrawal by not completing the questionnaires. This study was conducted with the approval of the Pacific University Institutional Review Board.

The results between those who enrolled in the Mindfulness-Based Intervention and Professional Orientation were compared. All analyses were conducted using SPSS for Windows version 16.0 (SPSS Inc., 2007). To test hypothesis one, data was analyzed with a mixed between-within analysis of variance (ANOVA) for each dependant variable: (a) mindfulness as measured by the MAAS, (b) mindfulness as measured by

FFMQ, (c) self-compassion, and (d) satisfaction with life. Independent variables were group (mindfulness and control) and time (time1, time2, and time3). In addition, to examine group differences as measured by the factors of the FFMQ and SCS two one-way multivariate analyses of variance (MANOVA) were conducted using data from week eight.

To test hypotheses two and three, relationships between the MAAS, FFMQ, SCS, and SWLS were examined using zero-order Pearson's correlations within each group. Comparisons of the strength of correlation coefficients across groups were completed using data from week eight, when the formal MBCT portion of the class was complete. Time two was selected as the time period which presented the greatest likelihood of demonstrating differences between groups. At time two participants had participated in regular mindfulness practices for 8 weeks, sufficient time for some changes to appear. It is hypothesized that within the later data collection periods participants may have decreased their mindfulness practices.

Results

Pre-Analysis Data Screening

All variables were examined using SPSS 16.0 (SPSS Inc, 2007) to evaluate data compliance with univariate and multivariate assumptions. Using a z-score cut off of 3.29 no univariate outliers were discovered. Using Mahalanobis distances of $p < .001$ as a conservative benchmark (Tabachnick & Fidell, 2001), no multivariate outliers were detected. All distribution assumptions were met (i.e., all variable skewness and kurtosis values were within acceptable limits) and no transformations were necessary. Listwise deletions were used to address missing data – as suggested by Tabachnik and Fidell (2001) cases with more than 15% missing data were excluded. Time 1 included 30 participants with 14 in the mindfulness group and 16 in the control group. Time 2 included 25 participants with 13 in the mindfulness group and 12 in the control. Final sample size analysis for all analysis was 21 with 13 in the mindfulness sample and 8 in the control sample.

Distribution Characteristics and Descriptive Statistics

Means, standard deviations, skewness and kurtosis values, standard errors, and Cronbach's Alpha for all variables are provided for the mindfulness and control Samples in Tables 1 and 2, respectively. The mean, standard deviation, and Cronbach's alpha of the mindfulness sample for the MAAS were comparable to the values reported in the normative sample (Brown & Ryan, 2003). Despite some variation, the mean and standard deviations of the five factors of the FFMQ amongst the mindfulness sample were roughly comparable to that of the normative sample. Amongst the mindfulness sample, the

Cronbach's Alphas for the five factors of the FFMQ were comparable to the normative sample. On the SCS the mean, standard deviation, and Cronbach's alpha for the mindfulness sample were comparable to the normative sample. On the SWLS the mean, standard deviation, and Cronbach's alpha of the mindfulness sample were consistent that of the normative sample.

The mean, standard deviation, and Cronbach's alpha of the control sample for the MAAS were comparable to the normative sample (Brown & Ryan, 2003). The mean and standard deviations of the five factors of the FFMQ amongst the control sample were comparable to that of the normative sample. Amongst the control sample, the Cronbach's Alphas for the five factors of the FFMQ were comparable to the normative sample. On the SCS the mean, standard deviation, and Cronbach's alpha for the mindfulness sample were comparable to the normative sample on five of the six factors. The Over-Identification factor was the exception which was lower than that of the normative sample. On the SWLS, the mean, standard deviation, and Cronbach's alpha of the control sample were consistent that of the normative sample.

Table 1*Means, Standard Deviations, Skewness, and Kurtosis by Variable for the MBCT Sample*

Variable	Mean	SD	Skewness (SE)	Kurtosis (SE)	Cronbach's Alpha
MAAS	3.69	.84	-1.14 (.60)	.06 (1.15)	.96
Observe	25.79	5.07	.86 (.60)	1.30 (1.15)	.77
Describe	28.43	7.28	-.29 (.60)	-.60 (1.15)	.93
Act/Awareness	25.07	7.00	.15 (.60)	-.33 (1.15)	.95
Nonjudge	29.21	6.62	-.49 (.60)	.25 (1.15)	.95
Nonreact	20.79	4.32	-.17 (.60)	-.06 (1.15)	.87
FFMQ Mean	129.29	19.52	-1.11 (.60)	1.00 (1.15)	.91
SelfKindness	3.17	1.03	-.76 (.60)	-.12 (1.15)	.87
Judgment	3.07	.96	.20 (.60)	-1.02 (1.15)	.87
Humanity	3.38	.91	.18 (.60)	-.88 (1.15)	.76
Isolation	2.93	1.16	-.06 (.60)	-.61 (1.15)	.87
SCS Mind	3.38	.74	.28 (.60)	-1.36 (1.15)	.68
Over ID	2.82	.78	-.58 (.60)	-.74 (1.15)	.78
SCS Mean	3.17	.82	.09 (.60)	-1.25 (1.15)	.96
SWLS	26.50	4.24	-.84 (.60)	.65 (1.15)	.79

Note. MAAS = Mindful Attention Awareness Scale, Observe = Five Facet Mindfulness Questionnaire – Observe factor; Describe = Five Facet Mindfulness Questionnaire – Describe factor; Act/Awareness = Five Facet Mindfulness Questionnaire – Act with Awareness factor; Nonjudge = Five Facet Mindfulness Questionnaire – Nonjudge factor; Nonreact = Five Facet Mindfulness Questionnaire – Nonreact factor; FFMQ Mean = Five Facet Mindfulness Questionnaire – Overall Mean; Self-Kindness = Self-Compassion Scale – Self-Kindness Factor; Judgment = Self-Compassion Scale – Self-Judgment Factor; Humanity = Self-Compassion Scale – Common Humanity Factor; Isolation = Self-Compassion Scale – Isolation Factor; SCS Mind= Self-Compassion Scale – Mindfulness Factor; Over ID = Self-Compassion Scale – Over-identification Factor; SCS Mean = Self-Compassion Scale – Overall Mean; SWLS=Satisfaction with Life Scale.

Table 2*Means, Standard Deviations, Skewness, and Kurtosis by Variable for the Control Sample*

Variable	Mean	SD	Skewness (SE)	Kurtosis (SE)	Cronbach's Alpha
MAAS	3.80	.90	-.77 (.60)	-.01 (1.15)	.91
Observe	27.06	4.92	-1.08(.60)	2.14 (1.15)	.77
Describe	27.44	7.11	-.80 (.60)	2.13 (1.15)	.94
Act/Awareness	25.25	5.89	-.01 (.60)	1.02 (1.15)	.93
Nonjudge	26.69	7.15	-.07 (.60)	-1.44 (1.15)	.94
Nonreact	21.94	3.38	-.24 (.60)	-1.24 (1.15)	.71
FFMQ Mean	128.38	19.57	-.20 (.60)	.35 (1.15)	.93
SelfKindness	3.11	.76	-.02 (.60)	-1.29 (1.15)	.84
Judgment	3.43	.75	-.09 (.60)	-.57 (1.15)	.78
Humanity	3.52	.88	-.45 (.60)	-.58 (1.15)	.88
Isolation	2.90	.77	.72 (.60)	.12 (1.15)	.76
SCS Mind	3.48	.78	-.58 (.60)	-.74 (1.15)	.87
Over ID	3.00	.61	.39 (.60)	-.40 (1.15)	.53
SCS Mean	3.11	.63	-.32 (.60)	-.47 (1.15)	.94
SWLS	24.56	6.00	-1.04 (.60)	.20 (1.15)	.85

Note. MAAS = Mindful Attention Awareness Scale, Observe = Five Facet Mindfulness Questionnaire – Observe factor; Describe = Five Facet Mindfulness Questionnaire – Describe factor; Act/Awareness = Five Facet Mindfulness Questionnaire – Act with Awareness factor; Nonjudge = Five Facet Mindfulness Questionnaire – Nonjudge factor; Nonreact = Five Facet Mindfulness Questionnaire – Nonreact factor; FFMQ Mean = Five Facet Mindfulness Questionnaire – Overall Mean; Self-Kindness = Self-Compassion Scale – Self-Kindness Factor; Judgment = Self-Compassion Scale – Self-Judgment Factor; Humanity = Self-Compassion Scale – Common Humanity Factor; Isolation = Self-Compassion Scale – Isolation Factor; SCS Mind= Self-Compassion Scale – Mindfulness Factor; Over ID = Self-Compassion Scale – Over-identification Factor; SCS Mean = Self-Compassion Scale – Overall Mean; SWLS=Satisfaction with Life Scale.

Analyses

To examine hypothesis 1, that is, that participants in a mindfulness-based cognitive therapy class would exhibit greater positive changes in mindfulness, self-compassion, and satisfaction with life than participants in a control group class, four between-within ANOVAs were run. In addition, to examine group differences in the five factors of the FFMQ and the six factors of the SCS two MANOVAS were run using data from the second data collection.

Impact of MBCT class on mindfulness as measured by the MAAS

A mixed between-within subjects analysis of variance was conducted to assess the impact of a mindfulness-based cognitive therapy (mindfulness, control) on participants' scores on the MAAS, across three time periods (pre-intervention, mid-intervention, post-intervention). There was no significant interaction between group type and time, Wilk's Lambda = .925, $F(2, 18) = .734$, $p = .494$, partial eta squared = .075. There was no main effect for time, Wilks' Lambda = .788, $F(2, 18) = 2.415$, $p = .118$, partial eta squared = .212. Participants did not show a statistically significant improvement in MAAS scores over the three time periods (see Table 3). The main effect for group was also not statistically significant $F(1, 19) = .061$, $p = .808$, partial eta squared = .003, suggesting no differences between the mindfulness and control group.

Table 3*MAAS Test Scores for MBCT and Control Across Three Time Periods*

Time Period	MBCT			Control		
	n	M	SD	n	M	SD
Time 1	13	3.81	.72870	8	3.82	1.05
Time 2	13	3.81	.53253	8	3.53	.76
Time 3	13	3.92	.87	8	3.98	.62

Impact of MBCT class on mindfulness as measured by the FFMQ

A mixed between-within subjects analysis of variance was conducted to assess the impact of a mindfulness-based cognitive therapy (mindfulness, control) on participants' scores on the FFMQ, across three time periods (pre-intervention, mid-intervention, post-intervention). There was no significant interaction between group type and time, Wilk's Lambda = .997, $F(2, 17) = .028$, $p = .973$, partial eta squared = .003. There was no main effect for time, Wilks' Lambda = .753, $F(2, 17) = 2.785$, $p = .090$, partial eta squared = .247. Participants did not show a statistically significant improvement in FFMQ scores over the three time periods (see Table 4). The main effect for group was also not statistically significant $F(1, 18) = .173$, $p = .683$, partial eta squared = .009, again suggesting no significant differences between mindfulness and control group.

A one-way between-groups multivariate analysis of variance was conducted to assess the impact of a mindfulness-based cognitive therapy (mindfulness, control) on participants' scores on the FFMQ. Data from the second data collection was used. The five dependent variables included: observe, describe, act with awareness, nonjudge, and nonreact. The independent variable was group. Preliminary assumption testing was conducted to check normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. No violations were discovered. There was no statistically significant differences between MBCT and control on the combined dependent variables, $F(5, 19) = .214$, $p = .952$, partial eta squared = .053. When the results for the dependent variable were considered separately, again no statistically significant differences were discovered.

Table 4*FFMQ Test Scores for MBCT and Control Across Three Time Periods*

Time Period	MBCT			Control		
	n	M	SD	n	M	SD
Time 1	13	129.54	20.29	7	133.86	16.30
Time 2	13	136.00	20.31	7	139.14	16.30
Time 3	13	136.00	22.04	7	139.14	14.10

Impact of MBCT class on self-compassion as measured by the SCS

A mixed between-within subjects analysis of variance was conducted to assess the impact of a mindfulness-based cognitive therapy (mindfulness, control) on participants' scores on the SCS, across three time periods (pre-intervention, mid-intervention, post-intervention). There was no significant interaction between group type and time, Wilk's Lambda = .901, $F(2, 18) = .985$, $p = .393$, partial eta squared = .099. There was no main effect for time, Wilks' Lambda = .765, $F(2, 18) = 2.761$, $p = .090$, partial eta squared = .235. Participants did not show a statistically significant improvement in SCS scores over the three time periods (see Table 5). The main effect for group was also not statistically significant $F(1, 19) = 1.52$, $p = .232$, partial eta squared = .074, suggesting no differences between the mindfulness and control groups.

A one-way between-groups multivariate analysis of variance was conducted to assess the impact of a mindfulness-based cognitive therapy (mindfulness, control) on participants' scores on the SCS. Data from the second data collection was used. The six dependent variables included: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. The independent variable was group. Preliminary assumption testing was conducted to check normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. No violations were discovered. There was no statistically significant differences between MBCT and control on the combined dependent variables, $F(6, 17) = .519$, $p = .786$, partial eta squared = .155. When the results for the dependent variable were considered separately, again no statistically significant differences were discovered.

Table 5*SCS Test Scores for MBCT and Control Across Three Time Periods*

Time Period	MBCT			Control		
	n	M	SD	n	M	SD
Time 1	13	3.23	.82	8	3.00	.50
Time 2	13	3.23	.81	8	2.84	.59
Time 3	13	3.50	.83	8	2.99	.55

Impact of MBCT class on life satisfaction as measured by the SWLS

A mixed between-within subjects analysis of variance was conducted to assess the impact of a mindfulness-based cognitive therapy (mindfulness, control) on participants' scores on the SWLS, across three time periods (pre-intervention, mid-intervention, post-intervention). There was no significant interaction between group type and time, Wilk's Lambda = .998, $F(2, 18) = .021$, $p = .979$, partial eta squared = .002. There was no main effect for time, Wilks' Lambda = .904, $F(2, 18) = .958$, $p = .402$, partial eta squared = .096. Participants did not show a statistically significant improvement in SWLS scores over the three time periods (see Table 6). The main effect for group was also not statistically significant $F(1, 19) = 1.923$, $p = .182$, partial eta squared = .092, suggesting no differences between the mindfulness and control groups.

Table 6*SWLS Test Scores for MBCT and Control Across Three Time Periods*

Time Period	n	MBCT		N	Control	
		M	SD		M	SD
Time 1	13	26.54	4.41	8	23.75	6.27
Time 2	13	26.08	5.09	8	22.88	7.66
Time 3	13	27.23	4.97	8	24.25	4.79

Correlations

To examine relationships between mindfulness (as measured by the MAAS and FFMQ) and self-compassion (as measured by the SCS) several Pearson product-moment correlations were conducted using the data from time 2, which included a sample of 25 with 13 participants from the MBCT group and 12 participants from the control. As shown in table 7, within the MBCT group correlations ranged between small and large ($r=.116-.755$) between self-compassion and mindfulness as measured by the FFMQ and SCS. The FFMQ Describe factor was significantly correlated with the SCS Kindness ($r = .585, p < .01$) and SCS Mindfulness factor ($r = .603, p < .05$). The FFMQ Act with Awareness factor was significantly correlated with SCS Self-Kindness factor ($r = .560, p < .05$), SCS Common Humanity ($r = .613, p < .05$), and SCS Mindfulness ($r = .683, p < .05$). The FFMQ Nonjudgmental factor was significantly correlated with SCS Self-Kindness factor ($r = .755, p < .01$), SCS Common Humanity ($r = .675, p < .05$), and SCS Mindfulness ($r = .696, p < .01$).

Large correlations ($r = .516-.682$) were also discovered between the MAAS and SCS. The SCS Common Humanity factor ($r = .571, p < .05$) and SCS Mindfulness ($r = .682, p < .05$) were significantly correlated with the MAAS.

As shown in Table 8 within the control group there were small to medium correlations ($r = .004-.488$) between self-compassion and mindfulness as measured by the FFMQ and SCS. None of the correlations between SCS and FFMQ were significant within the control group. Medium to large correlations ($r = .483-.595$) were discovered between the MAAS and SCS. The SCS Common Humanity factor ($r = .595, p < .05$) was significantly correlated with the MAAS.

Table 7

Correlations between Measures of Mindfulness, Self-Compassion, and Life Satisfaction in the MBCT Sample

Variable	MAAS	Observe	Describe	Act Aware	Nonjudge	Nonreact	Kindness	Humanity	SCS Mind	SWL
MAAS	—	.490	.403	.855**	.585*	.321	.516	.571*	.682*	.524
Observe		—	.158	.383	.148	.278	.326	.116	.544	.186
Describe			—	.636*	.468	.436	.585*	.501	.603*	.359
Act Aware				—	.578*	.339	.560*	.613*	.683*	.319
Nonjudge					—	.531	.755**	.675*	.696**	.500
Nonreact						—	.422	.330	.508	.066
Kindness							—	.838**	.872**	.398
Humanity								—	.755**	.427
SCS Mind									—	.586*
SWL										—

Note. MAAS = Mindful Attention Awareness Scale, Observe = Five Facet Mindfulness Questionnaire Observe Factor, Describe = Five Facet Mindfulness Questionnaire Describe factor, Act Aware = Five Facet Mindfulness Questionnaire Act w/ Awareness factor, Nonjudge = Five Facet Mindfulness Questionnaire Nonjudge factor, Nonreact = Five Facet Mindfulness Questionnaire Nonreact factor, Kindness = Self-Compassion Scale Self-Kindness factor, Humanity = Self-Compassion Scale Common Humanity factor, SCS Mind = Self-Compassion Scale Mindfulness factor, Judge= Self-compassion Scale Judgmental factor SWL = Satisfaction with Life Scale.. * $p < .05$. ** $p < .01$.

Table 8

Correlations between Measures of Mindfulness, Self-Compassion, and Life Satisfaction in the Control Sample

Variable	MAAS	Observe	Describe	Act Aware	Nonjudge	Nonreact	Kindness	Humanity	SCS Mind	SWL
MAAS	—	.279	-.319	.682*	.359	.126	.483	.595*	.568	.029
Observe		—	-.451	.388	.294	.003	.256	-.008	.004	-.206
Describe			—	.146	.188	-.459	-.281	.094	-.132	-.443
Act Aware				—	.526	-.032	.321	.488	.328	-.424
Nonjudge					—	.433	.149	.486	.328	-.302
Nonreact						—	.230	.316	.267	.381
Kindness							—	.777**	.782**	.394
Humanity								—	.754**	.256
SCS Mind									—	.471
SWL										—

Note. MAAS = Mindful Attention Awareness Scale, Observe = Five Facet Mindfulness Questionnaire Observe Factor, Describe = Five Facet

Mindfulness Questionnaire Describe factor, Act Aware = Five Facet Mindfulness Questionnaire Act w/ Awareness factor, Nonjudge = Five Facet

Mindfulness Questionnaire Nonjudge factor, Nonreact = Five Facet Mindfulness Questionnaire Nonreact factor, Kindness = Self-Compassion Scale

Self-Kindness factor, Humanity = Self-Compassion Scale Common Humanity factor, SCS Mind = Self-Compassion Scale Mindfulness factor. SWL=

Satisfaction with Life Scale * $p < .05$. ** $p < .01$.

Within the MBCT group there were small to large positive correlations ($r = -.398$ -.586) between self-compassion and life satisfaction. Only the SCS Mindfulness factor ($r = .586, p < .05$) was significantly correlated with the SWLS.

Within the control group there were small to medium correlations ($r = -.256$ -.471) between self-compassion and satisfaction with life. Only the Judgment factor, which is reverse scored, was significantly correlated ($r = -.705, p < .05$) with the SWLS.

To examine the significance of the differences between correlation coefficients between groups Lowry's (2011) online calculator was used. The comparison of the MBCT and Control groups' correlations with Fisher's r to z transformation revealed no significant differences ($z = .08$ -1.57) suggesting no significant differences between MBCT and control group.

As no significant differences between the groups were discovered, a third set of Pearson product-moment correlations were conducted using the combined samples from time 2. As shown in Table 9 there were small to large ($r = .051$ -.577) correlations between self-compassion and mindfulness as measured by the FFMQ and SCS. The FFMQ Act with Awareness factor was significantly correlated with SCS Self-Kindness ($r = .463, p < .05$), SCS Common Humanity ($r = .569, p < .01$), and SCS Mindfulness ($r = .565, p < .01$). The FFMQ Nonjudgmental factor was significantly correlated with SCS Self-Kindness factor ($r = .447, p < .05$), SCS Common Humanity ($r = .577, p < .01$), and SCS Mindfulness ($r = .519, p < .01$).

Medium to large correlations ($r = .481$ -.603) were also discovered between the MAAS and SCS. The SCS Kindness factor ($r = .481, p < .05$), Common Humanity factor

($r = .557, p < .01$) and SCS Mindfulness ($r = .603, p < .01$) were significantly correlated with the MAAS.

Within the combined group there were small to medium positive correlations ($r = .384-.497$) between self-compassion and life satisfaction. Only the SCS Mindfulness factor ($r = .497, p < .05$) was significantly correlated with the SWLS.

Table 9

Correlations between Measures of Mindfulness, Self-Compassion, and Life Satisfaction with Combined Samples

Variable	MAAS	Observe	Describe	Act Aware	Nonjudge	Nonreact	Kindness	Humanity	SCS Mind	SWL
MAAS	—	.387	.011	.736**	.439*	.203	.481*	.557**	.603**	.223
Observe		—	-.175	.358	.215	.111	.274	.051	.291	-.047
Describe			—	.441*	.329	-.054	.196	.335	.317	-.094
Act Aware				—	.543**	.149	.463*	.569**	.565**	-.055
Nonjudge					—	.469*	.447*	.577**	.519**	.006
Nonreact						—	.311	.310	.373	.270
Kindness							—	.810*	.828**	.384
Humanity								—	.753**	.322
SCS Mind									—	.497*
SWL										—

Note. MAAS = Mindful Attention Awareness Scale, Observe = Five Facet Mindfulness Questionnaire Observe Factor, Describe = Five Facet

Mindfulness Questionnaire Describe factor, Act Aware = Five Facet Mindfulness Questionnaire Act w/ Awareness factor, Nonjudge = Five Facet

Mindfulness Questionnaire Nonjudge factor, Nonreact = Five Facet Mindfulness Questionnaire Nonreact factor, Kindness = Self-Compassion Scale

Self-Kindness factor, Humanity = Self-Compassion Scale Common Humanity factor, SCS Mind = Self-Compassion Scale Mindfulness factor, Judge=

Self-compassion Scale Judgmental factor SWL = Satisfaction with Life Scale.. * $p < .05$. ** $p < .01$.

Discussion

The main purpose of this research was to examine changes in mindfulness, self-compassion, and satisfaction with life between those participating in MBCT course versus control group. Existing studies suggest participation in a mindfulness courses is associated with improvements in mindfulness, self-compassion, and satisfaction with life (Baer, 2003; Brown & Ryan, 2003; Birnie, 2009, Schroevers & Brandsma, 2011; Shapiro et al. 2005). Contrary to expectation and existing literature, no significant differences in mindfulness, satisfaction with life, or self-compassion were discovered for those participating in the MBCT group.

Why did participation in an MBCT course fail to improve mindfulness as measured by the MAAS and FFMQ, self-compassion as measured by SCS, and life satisfaction as measured by SWL? One possibility is that the course was presented in a way that significantly differed from other mindfulness courses. However, the presenters' extensive personal and professional mindfulness experience combined with the use of the MBCT manual suggests that the results were not due to how the material was presented.

As the majority of research has taken place with MBSR interventions it is possible that the despite the similarities, the changes made in MBCT interventions (removal of all day meditation retreat, removal of loving-kindness meditation, and psycho-education regarding depression) contributes to decreased positive outcomes in mindfulness, self-compassion, and life satisfaction. As of now, the evidenced is mixed with one study demonstrating no improvements in improvements in mindfulness following an MBCT course, and several that demonstrated positive outcomes similar to

those reported in the extensive MBSR literature (Rimes & Wingrove, 2010; Weber, Jermann, Gex-Fabry, Nallet, Bondolfi, Aubri, 2010).

Another possibility is that the academic nature of the class contributed to reduced outcomes. Of the three studies which present mindfulness-based interventions to mental health workers in training, only one of the studies presented the material as part of an academic class (Moore, 2008, Shapiro, Warren, & Biegel, 2007, Rimes, 2011). It is possible that presenting the material in an academic context alters how the information is processed and how the participants engage with the information. For example participants are not simply engaging the material in order to find relief from stress, they are also attempting to learn how to present the material to clients, searching existing research material for presentations, and being academically assessed regarding their attendance, participation, journals, test performance, and final presentation.

It may be that these additional requirements change how the participants engage with the material and experience mindfulness. The academic context and experience of being graded may make it more difficult for participants to adopt the non-judgmental stance fundamental to mindfulness. However, in the one other study in which MBCT was presented within an academic class, participants did in fact demonstrate significant improvements in mindfulness, self-compassion, and well-being (Shapiro, et al. 2007).

An additional possibility is that participants did not meditate as much as they had reported. As they were being graded, there were benefits to reporting more time meditating than were actually practiced. However, there is no evidence that participants misreported their meditation times. Also, participants completed a minimum of eight 45 minute meditation sessions as part of the course, and even minimal mindfulness

meditation practice, of 10 minutes have been associated with improvements in mindfulness (Moore, 2008).

A further possibility for the unexpected outcomes due to response biases. However, the trend of the data was opposite with what one would expect, with participants noting no changes, rather than over-reporting positive outcomes.

Was there something unique about the population that could decrease outcomes? Three studies have made use of graduate students in psychology with similar demographics and all demonstrated improvements in mindfulness and self-compassion (Moore, 2008, Shapiro, Warren, & Biegel, 2007, Rimes, 2011). Participants' pre-intervention scores were similar to those of the norms, so there appears to be nothing about the population that is skewing results.

Decentering has been suggested as one of the mechanisms by which mindfulness improves well-being (Shapiro, Carlson, Astin, & Freedman, 2006). Given that participants were graduate students in psychology they likely were familiar with the concept of decentering from their previous studies and exposure to cognitive-behavioral concepts. If they were already familiar with decentering, they may already have experienced the increase in life satisfaction associated with the application of this construct. However, no measure of decentering was given to determine if participants had high levels of decentering previous to participating in the course.

Another possibility is that the sample captured information about a population that simply does not respond to MBCT with increases in mindfulness, self-compassion, or life satisfaction. While these findings appear unique they may be more common due to the difficulty of publishing studies without significant results. Only one published study

was found that also found no increase in mindfulness following an MBCT or MBSR course (Weber et al., 2010). While there is no realistic way to determine the amount of unpublished studies, demonstrating no improvements in response to MBCT courses, it remains a possibility that several such studies exist.

There was significant attrition within the control group, half of the participants from time one did not provide information for time three. The resulting small sample size reduced the power of the study and may have contributed to the failure of several between group differences to reach statistical significance. In particular, several between group differences in SCS followed expected directions, but failed to reach statistical significance.

The majority of mindfulness studies have examined mindfulness-based interventions effects on symptoms and not measured its effects on positive qualities such as mindfulness and self-compassion (Neff, Rude & Kilpatrick, 2007). So while there is an ever expanding body of support for the effectiveness of MBSR and MBCT there is comparatively little evidence for how MBSR and MBCT effect variable of positive psychology (Hoffmann, Sawyer, Witt, & Oh, 2010; Neff & Mcgehee, 2009).

Another purpose of this study was to examine the correlations between mindfulness and self-compassion. As expected, and consistent with existing literature there were large positive correlations between several factors of mindfulness and self-compassion (Birnie et al. 2010; Neff, 2003). The correlations were larger within the MBCT group, with the describe and nonjudge factors correlating with self-kindness in a statistically significant way, the MAAS, act with awareness, and nonjudgmental factors significantly correlating with common humanity, and the MAAS, describe, act with

awareness, and nonjudge all significantly correlating with the self-compassion mindfulness factor. Within the control sample only the MAAS and common humanity factor were correlated in a statistically significant way. Small sample sizes ($n = 13$, $n = 8$) contributed to several large correlations ($r = .568$ and $.516$) not reaching the level of statistical significance.

Given the implicit cultivation of self-compassion within MBSR and MBCT, as well as some overlap within the constructs, the results were not surprising (Gerber, 2009; Neff, 2004). However, the common humanity factor's correlation with the MAAS within both MBCT and control group is noteworthy. The insight that all people suffer is fundamental to Buddhism and most approaches to mindfulness. While those who participated in the MBCT would have been exposed to this teaching, those in the control group may not have. The fact that both groups demonstrated statistically significant correlations between mindfulness and common humanity indicates a strong association between suffering as a common human experience and mindfulness within both meditators and non-meditators. It as yet remains unclear whether this understanding results from or contributes to a mindful style of attention. The common humanity factor may decrease some of the suffering associated with mindful attention to suffering by decreasing isolation and thus contributing to additional practice of mindfulness.

Self-kindness's correlation with mindfulness suggests a similar relationship. Within the current study there was a larger correlation between mindfulness and self-kindness and the MBCT group than the control. However, in the control group there was a moderate, though not statistically significant, correlation between the MAAS and self-kindness ($r = .483$).

The practice of mindfulness is at times frustrating and will inevitably put one in touch with suffering. Returning the wandering mind to pain or any object is often humbling. Self-kindness may contribute to continued mindfulness practice. Without the requisite self-kindness, mindfulness of painful experiences may be experienced as too punishing, leaving one to return to common strategies of avoidance. Self-kindness may reduce some of the suffering associated with mindfulness of painful experiences which in turn could increase the amount of time spent practicing mindfulness. The largest correlation in the study ($r = .755, p < .001$) took place between self-kindness and the nonjudgmental factor. Both self-kindness and nonjudgmental attitude may contribute to and strengthen each other.

Within the control group and contrary to expectation the observe and describe factors demonstrated small negative correlations with several self-compassion factors including self-kindness, common humanity, and self-compassion mindfulness. None of the correlations were statistically significant. Of particular surprise was that within the control group none of the factors of mindfulness were significantly correlated with the SCS mindfulness factor which is conceptually nearly identical. It is not clear at this time whether these results were an anomaly due to small sample size ($n = 8$) or novel findings. Given the existence of studies with much larger samples demonstrating opposite findings it is hypothesized be a result of small sample size (Birnie, 2009; Neff, 2004; Sharp et al. 2005). Analysis of the differences in correlations between the MBCT and control group did not detect and statistically significant differences.

Several researches have hypothesized that the recognition of pain and the ability to not act reflexively contributes to improvements in functioning of those who participate

in mindfulness (Carmody, Baer, Lykins, & Olendzki, 2009; Kuyen et al, 2010; Shapiro et al. 2006) . Self-kindness may be one of the factors which contributes to remaining present within aversive situations. Gilbert and Proctor (2006) hypothesize that self-kindness activates a system of self-soothing, reducing suffering enough to allow one to move forward in a valued direction.

The final hypothesis of this study was that self-compassion and satisfaction with life would be positively correlated. Analysis revealed small to large positive correlations between self-compassion and life satisfaction ($r = .256-.586$). Only the mindfulness factor of self-compassion demonstrated a statistically significant correlation with life satisfaction ($r = .586, p < .05$). The size of the correlations were less than expected and more closely support Shapiro et al.'s (2005) findings of small correlations than Neff's (2005) significant correlations. Van Dam and colleagues (2010) found that self-compassion was a better predictor of life satisfaction than mindfulness amongst those with mixed anxiety and depression, the findings of this study do not provide addition support for that position within a non-clinical population.

It was expected that the lack of isolation and self-judgment associated with self-compassion would lead to strong correlation with satisfaction with life (Neff, 2003a). However, self-kindness and common humanity factors were not significantly correlated with life satisfaction. The correlation of the SCS's mindfulness factor supports existing research demonstrating significant positive correlation between mindfulness and life satisfaction (Baer, Smith, & Allen, 2004; Brown & Ryan 2003; Shapiro et. al 2005). Yet the findings do not provide support for the position that those high in self-kindness and the common humanity factor will necessarily also experience greater life satisfaction.

Self-compassion is an implicit part of MBSR and MBCT (Germer, 2008).

Research regarding the affects of MBSR and MBCT on self-compassion is mixed (Neff, 2003, Shapiro et al. 2007). The present findings suggest that not all population experience improvements in self-compassion or even mindfulness following completion of an MBCT course. Some strong correlations were found between self-compassion and mindfulness but the correlations differed considerably between those who participated in MBCT and the control. Additional research is needed to clarify if and how participation in MBCT affects how mindfulness and self-compassion relate. Another area in need of study is how the context of the material (academic or self-improvement) affects outcomes.

The present study was limited in that it was not a randomized trial. Participants were chosen due their enrollment in two separate psychology courses. While all participants were graduate students in psychology those in the MBCT group were enrolled in a Doctoral program, while the control group was enrolled in a Master's program. While there were not significant differences between MBCT and control at base-line, the MBCT course was an elective and likely attracted participants with a personal interest in mindfulness while the control course was required and have drawn from a broader population.

The sample size of the present study was small and a larger sample is needed to test the reliability of the results. Small sample size also contributed to several large correlations not reaching statistical significance. A study with a larger sample may have found additional significant correlations. Ninety percent of the participants were women. While that may not have an effect on mindfulness, Neff (2003) found that women in

general exhibit lower levels of self-compassion. Additionally, the findings may have limited generalizability to the general population. The sample was 90% female, 80% white, and 100% enrolled in graduate school in psychology. The outcomes with a different population have yet to be determined.

A further limitation is that data was collected via self-report measures. Participants may have over or under reporting their results. For example, the data collection was quite extensive taking approximately 15-35 minutes and some participants may have sped through the process in order to finish more quickly.

Additional research is needed to explore differences in outcomes between participants in MBCT or MBSR classes. While there are many similarities between the courses, the active mechanism by which MBSR and MBCT effects participants has not been fully determined and it is not clear if those aspects which were removed from the MBSR program were essential to their success.

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Appendix A

Informed Consent Form

1. Study Title

The Relationship Between Mindfulness, Self-Compassion, Empathy, and Distress-Tolerance Among Psychology Graduate Students

2. Study Personnel

	Principle Investigator	Faculty Advisor	Investigator	Investigator
Name	Ted Askwith, M.S.	Michael Christopher, PhD	Elsbeth Mills	Andrew Bliesner
Institution	Pacific University	Pacific University	Pacific University	Pacific University
Program	School of Professional Psychology	School of Professional Psychology	School of Professional Psychology	School of Professional Psychology
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Telephone	(503) 274-0113	(503) 352-2498	(503) 640-8475	(503) 320-5042
Signature				

3. Study Location and Dates

The study will take place at Pacific University School of Professional Psychology. It will begin in August, 2009 and be completed by June, 2010.

4. Study Invitation and Purpose

The purpose of the present research is to investigate the relationship between mindfulness and a number of different constructs including self-compassion, empathy, and distress tolerance. You were invited to participate because you are a college student. Please read this form carefully and ask any questions you may have before agreeing to be in this study.

5. Study Materials and Procedures

If you agree to be in this study, we will ask to complete several brief questionnaires, which should take no longer than 20 minutes in total. You will also be asked to complete questionnaires at the middle (October, 2009) and end of this academic term (December, 2009), and again at 6-months after the end of this academic term (June, 2010).

6. Participant Characteristics and Exclusionary Criteria

Only participants who are currently enrolled graduate students in psychology at the School of Professional Psychology at Pacific University aged 18 years or older may participate in this study. Participants who do not meet the above criteria will be excluded from the study.

7. Anticipated Risks and Steps Taken to Avoid Them

There is minimal risk to participating in this research. Although unlikely, it is possible that you may be distressed by some of the questionnaire items. Should you feel distress as a result of completing this questionnaire, or for any other reason and you wish to speak to a mental health professional, please contact the Pacific University Student Counseling Center at 503-352-2191. Additionally, all data will be kept in a confidential manner. Informed consent and study data will be separately stored in a locked file cabinet in the Primary Investigator's office at Pacific University.

8. Anticipated Direct Benefits to Participants

There are no direct benefits to participants.

9. Clinical Alternatives (i.e., alternative to the proposed procedure) that may be advantageous to participants

Not Applicable.

10. Participant Payment

All participants will be automatically entered in a drawing to win one of three \$25.00 bookstore gift certificates. It is anticipated that there will be 50 participants in the study, thus there is 3 in 50 (6%) chance of winning a gift card.

11. Medical Care and Compensation In the Event of Accidental Injury

During your participation in this project it is important to understand that you are not a Pacific University clinic patient or client, nor will you be receiving complete mental health care as a result of your participation in this study. If you are injured during your participation in this study and it is not due to negligence by Pacific University, the researchers, or any organization associated with the research, you should not expect to receive compensation or medical care from Pacific University, the researchers, or any organization associated with the study.

12. Adverse Event Reporting Plan

In the event that you have an adverse reaction to the questionnaire items, the researcher will debrief the situation with you and provide you with assistance if needed. A report of the incident will also be filed with the Pacific University IRB.

13. Promise of Privacy

Data will be kept in a confidential manner. Informed consent and study data will be separately stored in a locked file cabinet in the Primary Investigator's office at Pacific University. Each participant will receive a number to match data over time points. Participant names will not appear on any of the questionnaires. The system used to match participant number and name will be stored separately from the completed data.

14. Voluntary Nature of the Study

Your decision whether or not to participate will not affect your current or future relations with Pacific University. If you decide to participate, you are free to not answer any question or withdraw at any time without prejudice or negative consequences. If you withdraw prior to completing the study you will still remain eligible to win the gift certificate drawing.

15. Contacts and Questions

The researchers will be happy to answer any questions you may have at any time during the course of the study. Complete contact information for the researchers is noted on the first page of this form. If you are not satisfied with the answers you receive, please call Pacific University's Institutional Review Board, at (503) 352 – 2112 to discuss your questions or concerns further. All concerns and questions will be kept in confidence.

16. Statement of Consent

I have read and understand the above. All my questions have been answered. I am 18 years of age or over and agree to participate in the study. I have been offered a copy of this form to keep for my records.

Participant's Signature
Date

Investigator's Signature
Date

17. Participant contact information

This contact information is required in case any issues arise with the study and participants need to be notified and/or to provide participants with the results of the study if they wish.

Would you like to have a summary of the results after the study is completed? ____Yes
____No

Participant's name: (Please Print) _____

Street address: _____

Telephone: _____

Email: _____

Appendix B

MATERIALS AND MEASURES (ENGLISH)

To help ensure your confidentiality, please DO NOT write your name anywhere on this survey.

Demographic Questionnaire

1. What is your gender?

_____ Male
_____ Female

2. How old are you? _____

3. Do you consider yourself Hispanic or Latino? Yes_____ No_____

4. Which group best describes your race?

_____ African American or Black
_____ Asian or Pacific Islander
_____ Native American or Alaska Native
_____ White or of European origin
_____ Mixed; parents are from two or more different groups
_____ Other (write in) _____

5. What is your religious affiliation?

_____ Buddhist
_____ Catholic
_____ Christian
_____ Jewish
_____ Lutheran
_____ Muslim
_____ Protestant
_____ None
_____ Other

6. Do you currently meditate? _____ (if NO skip the next 3 questions)

7. For how long have you been meditating? _____

8. For how long do you meditate each day? _____

9. To what extent do you carry your meditation practice into your daily life? (circle below)

1	2	3	4	5	6	7
Not At All	Almost Never	Very Infrequently	Somewhat Frequently	Very Frequently	Almost Always	Always

Mindful Attention Awareness Scale

Below is a collection of statements about your everyday experience. Using the 1–6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what *really reflects* your experience rather than what you think your experience should be.

1	2	3	4	5	6
Almost Always	Very Frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

1. I could be experiencing some emotion and not be conscious of it until some time later. 1 2 3 4 5 6
2. I break or spill things because of carelessness, not paying attention, or thinking of something else. 1 2 3 4 5 6
3. I find it difficult to stay focused on what's happening in the present. 1 2 3 4 5 6
4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way. 1 2 3 4 5 6
5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention. 1 2 3 4 5 6
6. I forget a person's name almost as soon as I've been told it for the first time. 1 2 3 4 5 6
7. It seems I am "running on automatic" without much awareness of what I'm doing. 1 2 3 4 5 6
8. I rush through activities without being really attentive to them. 1 2 3 4 5 6
9. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there. 1 2 3 4 5 6
10. I do jobs or tasks automatically, without being aware of what I'm doing. 1 2 3 4 5 6
11. I find myself listening to someone with one ear, doing something else at the same time. 1 2 3 4 5 6

12. I drive places on “automatic pilot” and then wonder why I went there. 1 2 3 4 5
6
13. I find myself preoccupied with the future or the past. 1 2 3 4 5 6
14. I find myself doing things without paying attention. 1 2 3 4 5 6
15. I snack without being aware that I’m eating. 1 2 3 4 5 6

Center for Epidemiologic Studies Depression Scale

Below is a list of some of the ways you may have felt or behaved. Using the 1-4 scale below, please indicate how often you have felt this way during the *past week*.

During the past week...

0	1	2	3
Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

1. I was bothered by things that usually don't bother me. 0 1 2 3
2. I did not feel like eating; my appetite was poor. 0 1 2 3
3. I felt that I could not shake off the blues even with help from my family or friends. 0 1 2 3
4. I felt that I was just as good as other people. 0 1 2 3
5. I had trouble keeping my mind on what I was doing. 0 1 2 3
6. I felt depressed. 0 1 2 3
7. I felt that everything I did was an effort. 0 1 2 3
8. I felt hopeful about the future. 0 1 2 3
9. I thought my life had been a failure. 0 1 2 3
10. I felt fearful. 0 1 2 3
11. My sleep was restless. 0 1 2 3
12. I was happy. 0 1 2 3
13. I talked less than usual. 0 1 2 3
14. I felt lonely. 0 1 2 3
15. People were unfriendly. 0 1 2 3
16. I enjoyed life. 0 1 2 3
17. I had crying spells. 0 1 2 3
18. I felt sad. 0 1 2 3
19. I felt that people disliked me. 0 1 2 3
20. I could not get "going." 0 1 2 3

Satisfaction with Life Scale

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item. Please be open and honest in your responding.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree

1. In most ways my life is close to ideal. 1 2 3 4 5 6 7

2. The conditions of my life are excellent. 1 2 3 4 5 6 7

3. I am satisfied with my life. 1 2 3 4 5 6 7

4. So far I have gotten the important things I want in life. 1 2 3 4 5 6 7

5. If I could live my life over, I would change almost nothing. 1 2 3 4 5 6 7

INTERPERSONAL REACTIVITY INDEX

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate letter on the scale at the top of the page: A, B, C, D, or E. When you have decided on your answer, fill in the letter on the answer sheet next to the item number. **READ EACH ITEM CAREFULLY BEFORE RESPONDING.** Answer as honestly as you can. Thank you.

ANSWER SCALE:

A	B	C	D	E
DOES NOT DESCRIBE ME WELL				DESCRIBES ME VERY WELL

- _____ 1. I often have tender, concerned feelings for people less fortunate than me.
- _____ 2. I sometimes find it difficult to see things from the "other guy's" point of view.
- _____ 3. Sometimes I don't feel very sorry for other people when they are having problems.
- _____ 4. I try to look at everybody's side of a disagreement before I make a decision.
- _____ 5. When I see someone being taken advantage of, I feel kind of protective towards them.
- _____ 6. I sometimes try to understand my friends better by imagining how things look from their perspective.
- _____ 7. Other people's misfortunes do not usually disturb me a great deal.
- _____ 8. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.
- _____ 9. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.
- _____ 10. I am often quite touched by things that I see happen.
- _____ 11. I believe that there are two sides to every question and try to look at them both.
- _____ 12. I would describe myself as a pretty soft-hearted person.

_____ 13. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.

_____ 14. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

SELF-COMPASSION SCALE

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

**Almost
never**

1

2

3

4

**Almost
always**

5

- _____ 1. I'm disapproving and judgmental about my own flaws and inadequacies.
- _____ 2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
- _____ 3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
- _____ 4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
- _____ 5. I try to be loving towards myself when I'm feeling emotional pain.
- _____ 6. When I fail at something important to me I become consumed by feelings of inadequacy.
- _____ 7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.
- _____ 8. When times are really difficult, I tend to be tough on myself.
- _____ 9. When something upsets me I try to keep my emotions in balance.
- _____ 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.

- _____ 11. I'm intolerant and impatient towards those aspects of my personality I don't like.
- _____ 12. When I'm going through a very hard time, I give myself the caring and tenderness I need.
- _____ 13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.
- _____ 14. When something painful happens I try to take a balanced view of the situation.
- _____ 15. I try to see my failings as part of the human condition.
- _____ 16. When I see aspects of myself that I don't like, I get down on myself.
- _____ 17. When I fail at something important to me I try to keep things in perspective.
- _____ 18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.
- _____ 19. I'm kind to myself when I'm experiencing suffering.
- _____ 20. When something upsets me I get carried away with my feelings.
- _____ 21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.
- _____ 22. When I'm feeling down I try to approach my feelings with curiosity and openness.
- _____ 23. I'm tolerant of my own flaws and inadequacies.
- _____ 24. When something painful happens I tend to blow the incident out of proportion.
- _____ 25. When I fail at something that's important to me, I tend to feel alone in my failure.
- _____ 26. I try to be understanding and patient towards those aspects of my personality I don't like.

Directions: Think of times that you feel distressed or upset. Select the item from the menu that best describes your beliefs about feeling distressed or upset.

1. Strongly agree
2. Mildly agree
3. Agree and disagree equally
4. Mildly disagree
5. Strongly disagree

	Scale
1. Feeling distressed or upset is unbearable to me.	Tolerance
2. When I feel distressed or upset, all I can think about is how bad I feel.	Absorption
3. I can't handle feeling distressed or upset.	Tolerance
4. My feelings of distress are so intense that they completely take over.	Absorption
5. There's nothing worse than feeling distressed or upset.	Tolerance
6. I can tolerate being distressed or upset as well as most people.	Appraisal
7. My feelings of distress or being upset are not acceptable.	Appraisal
8. I'll do anything to avoid feeling distressed or upset.	Regulation
9. Other people seem to be able to tolerate feeling distressed or upset better than I can.	Appraisal
10. Being distressed or upset is always a major ordeal for me.	Appraisal
11. I am ashamed of myself when I feel distressed or upset.	Appraisal
12. My feelings of distress or being upset scare me.	Appraisal
13. I'll do anything to stop feeling distressed or upset.	Regulation
14. When I feel distressed or upset, I must do something about it immediately.	Regulation
15. When I feel distressed or upset, I cannot help but concentrate on how bad the distress actually feels.	Absorption

Scoring: Item 6 is reverse scored. Subscale scores are the mean of the items. The higher-order DTS is formed from the mean of the four subscales.

Appendix C

Email Recruitment Message

Dear Student,

You are invited to participate in a research study on mindfulness and several related constructs. You were invited to participate because you are a graduate student in the School of Professional Psychology at Pacific University. If you agree to be in this study, we will ask you to complete several questionnaires at 4 time points over the next 10 months. These questionnaires will take approximately 10-20 minutes to complete each time. All participants will be automatically entered in a drawing to win 1 of 3 \$25.00 bookstore gift certificates. If you are interested in participating please reply to this email to schedule an appointment. If you have any questions about the research feel free to email the Primary Investigator Ted Askwith (askw8350@pacificu.edu). Thank You!

Sincerely,

Ted Askwith, M.S., Elspeth Mills, and Andrew Bliesner

Appendix D

Syllabi of Classes

PROFESSIONAL ORIENTATION: IDENTITY & ETHICS

CPSY 503-01 & 503-02

Fall 2008

INSTRUCTOR: Michael Christopher, PhD

OFFICE: 611

EMAIL: mchristopher@pacificu.edu

PHONE: 503-352-2498

OFFICE HOURS: Thursdays 3-5 and by appointment.

COURSE DESCRIPTION

Course schedule: 1:00-4:00 or 6:00-9:00 on Tuesdays (see **COURSE CONTENT** for specific dates). The course is 14 weeks and is divided into four parts. Part I is 3 weeks long and will be devoted to professional identity issues (program orientation, context, credentialing, professional roles, self-care, and affiliations). Part II spans weeks 4 through 9 and will focus on ethical issues (values clarification, client rights, counselor responsibilities, confidentiality, privacy & privilege, establishing boundaries, supervision, and working with diverse populations). Part III (weeks 10 and 11) focuses on ethical issues in diagnosis, treatment planning, and managed care. Part IV (weeks 12-14) is devoted to contemporary issues in counseling.

COURSE OBJECTIVES

This course is an introduction to professional issues in the practice of counseling psychology. Specific goals are to enhance knowledge of: 1) the historical context of counseling and psychology; 2) credentialing, certification, and licensure; 3) professional options, roles and responsibilities; 4) professional affiliations; 5) ethical, moral, spiritual and legal issues in the practice of psychology; 6) treatment planning, diagnosis and documentation, and; 6) working within a managed care environment. Diversity in the context of ethical and professional issues will also be addressed throughout the semester.

TEXTS & COURSE MATERIALS

- 1) Pope, K. S., & Vasquez, M. J. T. (2007). *Ethics in psychotherapy and counseling: A practical guide*. San Francisco: John Wiley & Sons (hereafter P&V).
- 2) Additional readings are on *Electronic Reserve* at the library:
<http://pacificu.docutek.com/eres/> (password: Christopher)
- 3) Powerpoint lecture slides are accessible via *Blackboard* (these will be uploaded each week no later than 12 hours before class):
<http://blackboard.pacificu.edu/webct/entryPageIns.dowebct>

GRADING:

There are a total of 375 possible points in this course. Each of the 2 exams are worth 125 points, the Great Debates are worth 75 points, and class participation is worth 50 points

A = 338-375

B = 300-337

F = 299 and below

Exams (250 pts total)

Each of the exams will be approximately half objective questions (i.e., multiple choice) and approximately half essay questions. Both exams will be take-home, you will have one week to complete each exam. The exams will be sent via email and you will submit them back via email.

The Great Debates (75 pts total)

Students will work in an assigned group of 2 and will present contrasting viewpoints on a selected topic. One group of 2 will present the “pro” side of an issue and the other group of 2 will present the “con” side. Each group’s presentation will be 20 minutes with 20 minutes at the end devoted to group discussion/questions/rebuttal (approximately one hour in total for each issue). An outline (can be copies of powerpoint slides) of the presentations should be distributed to members of the class at the time of the presentation. Attach an APA style bibliography to the outline. Each group should provide examples of ethical, legal, and empirical support for each viewpoint presented. Attend to issues of diversity as they relate to the topic under consideration. Creativity is welcomed! Email me a list of your top **three** topic preferences by no later than **9/16/08** (include topic and preference for pro or con side). Although this is a group project, **each presenter will receive an individual presentation grade** (see grading sheet in Appendix A).

<i>Date</i>	<i>Topic</i>	
<i>Debaters</i>		
November 18th	- Oregon Death with Dignity Act - Prescription Privileges for Counselors/ Psychologists - Tele and Internet Therapy	TBD
December 2nd	- Involuntary Commitment - Manualized Psychological Treatments	TBD

Class participation (50 pts total)

Class participation is vital to the assimilation of the course material. Most class periods will allow time for class participation in the form of role-plays, small group discussions, and class discussions. Please read all relevant material before each class and come prepared to participate in discussion. Please notify me in advance, if possible, when you are unable to attend class. In addition to missing classes, if you come to class and are disruptive with too many questions, leave class frequently, use the cell-phone, AND/OR regularly do not contribute to class discussions you will do poorly on your participation grade. Additionally, the use of laptops for E-MAILING, WEBSURFING, AND OTHER NON-CLASS RELATED ACTIVITY IS STRICTLY PROHIBITED DURING ALL CLASS PERIODS. Violation of this policy will result in a substantial deduction of class participation points.

Civility/Respect

To create and preserve a classroom atmosphere that optimizes teaching and learning, all participants share a responsibility in creating a civil and non-disruptive forum. It is likely you may not agree with everything that is said or discussed in the classroom. Courteous behavior and responses are expected. Neither instructor nor student should be subject to others’ behavior that is rude, disruptive, intimidating, or demeaning. Classroom discussion should be civilized and respectful to everyone and relevant to the topic we are discussing. Classroom discussion is meant to allow us to hear a variety of viewpoints. This can only happen if we respect each other and our differences.

Adapted from Classroom Civility (<http://ic.ucsc.edu/CTE/teaching/tips-civility.html>)

Diversity:

The process of reaching the course objectives listed above includes exposing students to the ways in which they can become sensitive to diversity issues in their role as a professional counselor.

Diversity as discussed in this section and throughout the course refers to the range of cultural, racial, ability, sexual orientation, religious and other client-specific factors that counselors/researchers must respect in order to conduct effective, ethical clinical practice. Our inclusion of issues regarding diverse populations will therefore be accomplished on an ongoing basis as part of regular class discussion. Most importantly, the class will be conducted and issues discussed within a framework of diversity that is in accordance with the American Psychological Association's and American Counseling Association's ethical guidelines. With respect to these guidelines, our focus will be on the role of the counselor as a professional whose expertise in the change process allows him or her to ask questions and seek out information/consultation regarding diversity issues as appropriate, and that conveys respect for the values, roles, perspectives, and customs of the clients and participants with whom they work.

Classroom accommodations

Services and accommodations are available to students covered under the Americans with Disabilities Act. If you require accommodations in this course, you must immediately contact Edna K. Gehring, Director of Learning Support Services for Students with Disabilities at 359-2107 or e-mail her at LSS@pacificu.edu. She will meet with you, review the documentation of your disability and discuss the services Pacific offers and any accommodations you require for specific courses.

Academic dishonesty

Any evidence of cheating, plagiarism, or other forms of academic dishonesty relating to assignments or activities involved in this class, will result in an automatic F for this course. When in doubt, please ask.

GSPY 853 Mindfulness-Based Interventions

Fall 2007 Thursday 9am-12noon

Genevieve Arnaut, Psy.D., Ph.D., & James Lane, Ph.D.

II. 3 credit hours

III. COURSE DESCRIPTION: *Through readings, experiential exercises, discussion, and daily practice, participants will be familiar with mindfulness meditation and its utility as an intervention, and learn guidelines for using mindfulness-based interventions in a group setting. Students will also learn Buddhist psychological principles relevant to mindfulness practice.*

IV. MAXIMUM ENROLLMENT: 25

V. CONTENT: *See attached class schedule*

VI. DIVERSITY: *Discussions will address implications of diversity variables, including ethnicity, religion, and diagnosis, for considering mindfulness-based interventions.*

VII. READINGS:

Required Texts:

Germer, C. K., Siegel, R. D., & Fulton, P. R. (Eds.). (2005). *Mindfulness and psychotherapy*. NY: Guilford. ISBN 1-59385-139-1

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: Guilford. ISBN 1-57230-706-4.

Additional Required Readings:

Course Pack: Available at the Campus Bookstore

Ekman, P., Davidson, R., Richard, J., Ricard, M., & Wallace, B. A. (2005). Buddhist and psychological perspectives on emotions and well-being. *Current Directions in Psychological Science*, 14(2), 59-63.

Hayes, S. C. (2002). Buddhism and Acceptance and Commitment Therapy. *Cognitive & Behavioral Practice*, 9(1), 58-66.

Kumar, S. M. (2002). An introduction to Buddhism for the cognitive-behavioral therapist. *Cognitive & Behavioral Practice*, 9(1) 40-43.

Robins, C. J. (2002). Zen principles and mindfulness practice in Dialectical Behavior Therapy. *Cognitive & Behavioral Practice*, 9(1), 50-57.

Available through University Library online Full Text Service

Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology Science and Practice*, 10(2), 125-143.

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness assessment. *Assessment*, 13(1), 27-45.

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, L., Carmody, J., et al. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11, 230-242.

Borkovec, T. D. (2002). Life in the future versus life in the present. *Clinical Psychology: Science & Practice*, 9(1), 76-80.

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology Science and Practice*, 10(2), 144-156.

Kenny, M.A., & Williams, J.M.G. (2007). Treatment-resistant depressed patients show a good response to Mindfulness-based Cognitive Therapy. *Behaviour Research and Therapy*, 45, 617-625

- Roemer, L., & Orsillo, S. M. (2002). Expanding our conceptualization of and treatment for generalized anxiety disorder: Integrating mindfulness/acceptance-based approaches with existing cognitive-behavioral models. *Clinical Psychology: Science & Practice*, 9(1), 54-68.
- Wallace, B. A., & Shapiro, S. L. (2006). Mental balance and well-being: Building bridges between Buddhism and Western psychology. *American Psychologist*, 61(7), 690-701.
- Walsh, R., & Shapiro, S. L. (2006). The meeting of meditative disciples and Western psychology: A mutually enriching dialogue. *American Psychologist*, 61(3), 227-239.

Other Material (Order through instructors prior to beginning of course):

Kabat-Zinn, Jon: *Mindfulness Meditation Practice CDs or Tapes, Series 1*

(cost will be \$24 for CDs, \$14 for cassette tapes if we submit an order for a minimum of 10 for each)

If you choose to order these individually, you may do so on line at <http://www.mindfulnessstapes.com/> for the retail price of \$30 for CDs and \$20 for cassette tapes.

Recommended Readings to Assist with Mindfulness Practice & Buddhist Teachings:

- Batchelor, S. (1998). *Buddhism without beliefs: A contemporary guide to awakening*. New York: Riverhead Books. ISBN: 1-57322-656-4
- Goldstein, J., & Kornfield, J. (1987). *Seeking the heart of wisdom: The path of insight meditation*. Boston: Shambala. ISBN: 1-57062-805-X
- Gunaratana, H. (2002). *Mindfulness in plain English* (Updated & expanded ed.). Boston: Wisdom Publications. ISBN: 0-86171-321-4.
- NOTE: first edition available online at not cost:
http://www.vipassana.com/meditation/mindfulness_in_plain_english.php
<http://www.budsas.org/ebud/mfneng/mind0.htm>
<http://www.urbandharma.org/udharma4/mpe.html>
- Kornfield, J. (1993). *A path with heart: A guide to the perils and promises of spiritual life*. NY: Bantam. ISBN: 0-553-37211-4
- Rahula, W., & Demieville, P. (1974/1997). *What the Buddha taught* (2nd and enlarged ed.) NY: Grove/Atlantic. ISBN: 1-8021-2021-3

Websites of Interest

<http://www.accesstoinsight.org/index.html>
<http://www.buddhanet.net/>
<http://www.budsas.org/ebud/ebidx.htm>
http://www.buddhistinformation.com/eightfold_path_for_the_householder1.htm

VIII. **FORMAT: Discussion, demonstration, practice, lecture.**

IX. **EVALUATION:**

Attendance and participation, 14%: Attendance and participation is a key part of this course, and students are expected to attend each class. In addition, students are expected to participate in class discussions and

practice exercises, and to commit to 45 min of mindfulness practice per day, 6 days/wk, for the duration of the class.

Journal, 26%: Students will turn in a weekly response to readings and practice that reflects the impact of these experiences on their daily lives and their framework for professional practice. Most students write about their personal experiences with the exercises, a question or comment about the readings, or their discoveries about how the exercises have impacted their experience as a therapist. You can feel free to be positive and/or negative in your description of your experience. You may also be creative. For example, you may encounter or write a poem that speaks to your experience and choose to send that. You will not be graded on the content of your journal entries, except in the unlikely event that comments are unprofessional (e.g. flippant or disrespectful of authors, instructors, classmates, or clients, real or hypothetical).

Journal responses can be as short as a few sentences or as long as a couple of pages. **They should be sent via e-mail to both instructors by 9:00 a.m. on the day before each class session (i.e., by Wednesday at 9:00 a.m.), starting with the second class (arna7558@pacificu.edu; lanejb@pacificu.edu)** (unless there are extenuating circumstances, such as a computer malfunction, in which case they should be handed in at the class session). These entries help us to know that you are working with the material, which is important in an experiential course. Also, they help us to get a sense of your experience. We typically will not respond individually to your journal entries, unless you ask a question or request input. However, by getting them a day early, it gives us a chance to address common issues or experiences in class.

Exam, 30%: On one short take-home exam, students will demonstrate their understanding of basic principles underlying mindfulness practice. The exam is open-book, but students are expected to work on it independently. Answers should be typed, double-spaced, APA style.

Presentation, 30%: Students will work in groups to present one topic related to mindfulness approaches in therapy. Four topics are available and listed on the syllabus. The presentation should be 1.5 hours in length and should have the following components:

- 1) A summary and discussion of the information contained in the basic readings, supplemented with information from any additional readings that assist in understanding the topic. Please note that you are not expected to go through the assigned readings in their entirety – assume the class has read the readings.
- 2) A handout containing the basic information presented as well as a listing of all references used.
- 3) Questions for class discussion.

Learning Support Services for Students with Disabilities Statement

Services and accommodations are available to students covered under the Americans with Disabilities Act. If you require accommodations in this course, you must immediately contact Edna K. Gehring, Director of Learning Support Services for Students with Disabilities at 503-352-2107 or e-mail her at LSS@pacificu.edu. She will meet with you, review the documentation of your disability, and discuss the services Pacific offers and any accommodations you require for specific courses. It is extremely important that you begin this process at the beginning of the semester. Please do not wait until the first test or paper.

Date	Topic	Reading
August 30	Orientation to class, Introduction to mindfulness and MBCT	Segal et al.: Ch 1 & 2
September 6	MBCT Session 1 <i>Journal due</i> Class discussion: Four Noble Truths	Segal et al.: Ch 3 & 4 Kumar (2002), Ekman et al. (2005)
13	MBCT Session 2 <i>Journal due</i> Class discussion: Three Characteristics of Worldly Existence	Segal et al.: Ch 6
20	MBCT Session 3 <i>Journal due</i> Class discussion: Five Hindrances	Segal et al.: Ch 7
27	MBCT Session 4 <i>Journal due</i> Class discussion: Eightfold Path	Segal et al.: Ch 8
October 4	MBCT Session 5 <i>Journal due</i> Class discussion: Eightfold Path (cont'd)	Segal et al.: Ch 9
11	MBCT Session 6 <i>Journal due</i> Class discussion: Brahma viharas	Segal et al.: Ch 10
18	MBCT Session 7 <i>Journal due</i> Class discussion: Eight Worldly Conditions	Segal et al.: Ch 11
25	MBCT Session 8 <i>Journal due</i> Class discussion: Karma	Segal et al.: Ch 12
November 1	Leading a mindfulness-based group <i>Journal due</i> Class discussion: Equanimity	Segal et al.: Ch 5, 13, 14, 15 Kenny & Williams (2007)
8	Student-led discussion: Other therapeutic approaches using mindfulness <i>Journal due</i>	Germer et al.: Ch. 1, 6 Hayes (2002), Robins (2002)
15	Student-led discussion: Anxiety from a mindfulness perspective <i>Journal due</i>	Germer et al.: Ch 8 Borkovec (2002), Roemer & Orsillo (2002)
22	<i>Thanksgiving—No Class</i>	
29	Student-led discussion: Overview of research on mindfulness <i>Journal due</i>	Germer et al. : Ch 11 Baer (2003), Baer et al. (2006), Bishop et al. (2004)
December 6	Student-led discussion: Merging Eastern & Western approaches <i>Take-home exam due</i> <i>Journal due</i>	Germer et al.: Ch 2, 12, Kabat-Zinn (2003), Wallace & Shapiro (2006), Walsh & Shapiro (2006)